

Application to Planning Commission and Board of Supervisors

Application For: (check appropriate boxes) <input type="checkbox"/> Rezoning <input type="checkbox"/> Rezoning & Special Use Permit <input checked="" type="checkbox"/> Special Use Permit	
Owner/Applicant Information: (Use current mailing/contact information for all property owners. An additional sheet may be attached for multiple owners.) <i>PROJECT MANAGER - AEP</i> Property Owner: <u>APPALACHIAN POWER COMPANY</u> Agent: <u>C.N. TOM LINKOUS II</u> Address: <u>P.O. BOX 2021</u> Address: <u>P.O. BOX 2021</u> <u>ROANOKE, VA 24022-2121</u> <u>ROANOKE, VA 24022-2121</u> Phone 1: <u>-</u> Phone 1: <u>540-562-7097</u> Phone 2: <u>-</u> Phone 2: <u>540-519-6689</u> Email: <u>-</u> Email: <u>tnlinkouse@aep.com</u>	
Location of Property/ Site Address: <u>1214 PANORAMA DR. BLACKSBURG VA. 24060</u>	
Legal Record of Property: Total Area: <u>3.559</u> Acres Magisterial District <u>BLACKSBURG</u> Parcel ID: <u>032009</u> Tax Parcel Number(s): <u>029-A6</u>	
Rezoning Details: Current Zoning District: <u>A-1</u> Requested Zoning District: <u>N/A</u> Desired Use(s): <u>EXISTING ELECTRIC SUBSTATION, REZONING NOT REQUESTED.</u>	
Special Use Permit: Current Zoning District <u>A-1</u> Total Area/Acres: <u>3.559 AC.</u> Desired Use(s): <u>ELECTRIC SUBSTATION 138KV. EXPAND STATION TO UPGRADE AND ADD EQUIPMENT FOR RELIABILITY.</u>	
Comprehensive Plan Designation: <u>RESOURCE STEWARDSHIP</u>	
Traffic Impact Analysis Required: <input type="checkbox"/> Yes (payment enclosed) <input checked="" type="checkbox"/> No	
<i>I certify that the information supplied on this application and on the attachments provided (maps or other information) is accurate and true to the best of my knowledge. In addition, I hereby grant permission to the agents and employees of Montgomery County and State of Virginia to enter the above property for the purposes of processing and reviewing the above application.</i>	
Property Owner(s) Signature	Date
<u>C.N. Linkous</u>	<u>1/4/16</u>
Agent's Signature Date <u>AEP PROJECT MANAGER</u> <u>FOR APPALACHIAN POWER CO.</u>	

Date Received: 1/4/2016 **FOR OFFICE USE ONLY** Application Number: SU-2016-13623

Traffic Impact Analysis and Payment Received: Yes No Date Submitted to VDOT: _____



Date: January 5, 2016

Re: Appalachian Power Company's proposed North Blacksburg Substation Improvements (Parcel ID No. 032009; Tax Map ID No. 029-A 6)

Dari S. Jenkins, CZA
Planning & Zoning Administrator
Planning & GIS Services
Montgomery Co. Government Center
755 Roanoke St., Suite 2A
Christiansburg, VA 24073-3177
(540) 394-2148 Office

Ms. Jenkins:

Appalachian Power Company ("Appalachian"), an affiliate of American Electric Power Company, Inc., is proposing substation improvements at its North Blacksburg Substation (originally built in 1965) to maintain continued reliable electric service and to address the growing electric needs in Montgomery County. The substation is located at 1214 Panorama Drive, Blacksburg, VA, 24060.

Proposed improvements are minor and comparable in character to the existing facilities and equipment. The work generally includes expanding the existing substation yard approximately 50' to the east (see **Exhibit 1**) and installing the following:

- New breakers, buswork, two H-Frame transmission line structures (approximately 60' tall) and a control house (old control house will be removed) all located in the existing or expanded substation yard.
 - The two new transmission line H-Frames (see **Exhibit 2**) are needed to bring the existing transmission line into the substation at a taller height to allow the new electrical equipment (circuit breakers) to be installed underneath them. The existing structures are approx. 35' tall (see **Exhibit 3**) and will be removed.
- One monopole transmission structure (approximately 100' tall) on the existing substation property together with a minor relocation of the existing transmission line within the existing transmission line right-of-way directly adjacent to the substation property.

American Electric Power
P.O. Box 2021
Roanoke, VA 24022
(540) 562-7097



The preliminary cost for the improvements is approximately \$5 million. Estimated county annual property tax revenues attributable to the improvements are approximately \$28,000. Construction is slated to start in first quarter of 2016 with an expected in-service date of second quarter of 2017.

The site and all adjacent properties are zoned A-1 Agricultural District. Appalachian is requesting the following:

- Special use permit if deemed required.
- Approval pursuant to Virginia Code § 15.2-2232, if required.

Please contact me if I can help in anyway.

Sincerely,

A handwritten signature in blue ink, appearing to read "C.N. Linkous II".

C.N. Tom Linkous II, Project Manager
American Electric Power
P.O. Box 2021
Roanoke, VA 24022
Ph: (540) 562-7097, Fax: (540) 562-7050



The following responses to Section 10-54(3)(g) of the Montgomery County Zoning Ordinance and the attached exhibit provide additional details concerning **Appalachian Power Company's proposed North Blacksburg Substation Improvements.**

1. Whether the proposed Special Use Permit is consistent with the Comprehensive Plan (Addressed under "3. Comprehensive Plan Justification").

The existing substation, which was built in 1965, is located in the land use policy area Resource Stewardship (PLU 1.2). The Comprehensive Plan does not provide specific location recommendations relative to electric substations improvements but the need for additional utility facilities is addressed in the Utilities Section (UTL 2.0) of the current plan. The proposed improvements are consistent with the plan for the following reasons: (i) the improvements do not negatively impact people or natural environment; (ii) the project is necessary to maintain reliable electric service to the residences, farms, businesses and other customers in the surrounding area served by the substation; and (iii) the improvements are entirely contained within the existing substation property or within the existing transmission line right-of-way ("ROW") adjacent to the existing substation property. Furthermore, using the existing substation and the existing ROW is consistent with public preferences, SCC Staff guidelines, and the preference in Code of Virginia §§ 56-46.1 and 56-259 for paralleling or utilizing existing ROWs for transmission facilities when feasible.

2. Whether the proposed Special Use Permit will adequately provide for safety from fire hazards and have effective measures of fire control.

The proposed substation facilities are required to meet the National Electric Safety Code (NESC) requirements.

3. The level and impact of any noise emanating from the site, including that generated by the proposed use, in relation to the uses in the immediate area.

There will not be any additional noise from operation of the proposed substation equipment; consequently, the rural character will not be impacted by noise from the proposed project operation. Noise during construction will be temporary.

4. The glare or light that may be generated by the proposed use in relation to uses in the immediate area.



The existing and proposed dusk to dawn security lighting will be comparable and will not impact the adjacent properties.

5. The proposed location, lighting and type of signs in relation to the proposed use, uses in the area, and the sign requirements of this Ordinance.

No additional signage will be installed for the existing substation.

6. The compatibility of the proposed use with other existing or proposed uses in the neighborhood, and adjacent parcels.

The existing substation and all adjacent properties are zoned A-1 Agricultural District (see **Exhibit 1**). The nearest residence is approximately 400' north of the substation. The existing character and uses will not be affected by the proposed substation improvements. Furthermore, using the existing substation (built in 1965) and the existing ROW is consistent with public preferences, SCC Staff guidelines, and the preference in Code of Virginia §§ 56-46.1 and 56-259 for paralleling or utilizing existing ROWs for transmission facilities when feasible.

7. The location and area footprint with dimensions (all drawn to scale), nature and height of existing or proposed buildings, structures, walls, and fences on the site and in the neighborhood.

The work generally includes expanding the existing substation yard approximately 50' to the east (see **Exhibit 1**) and installing the following:

- New breakers, buswork, two H-Frame structures (approximately 60' tall) and a control house (old control house will be removed) all located in the existing or expanded substation yard.
 - The two new transmission line H-Frames (see Exhibit 2) are needed to bring the existing transmission line into the substation at a taller height to allow the new electrical equipment (circuit breakers) to be installed underneath them. The existing structures are approx. 35' tall (Exhibit 3) and will be removed.
- One monopole transmission structure (approximately 100' tall) on the existing substation property together with a minor relocation of the existing transmission line within the existing right-of-way directly adjacent to the substation property.



8. The nature and extent of existing or proposed landscaping, screening and buffering on the site and in the neighborhood.

The existing substation is surrounded by existing pasture/grazing land. The nearest residence is approximately 400' north of the substation.

9. The timing and phasing of the proposed development and the duration of the proposed use.

Construction is slated to start in first quarter of 2016 with an expected in-service date of second quarter of 2017. The duration of use is indefinite.

10. Whether the proposed Special Use Permit will result in the preservation or destruction, loss or damage of any topographic or physical, natural, scenic, archaeological or historic feature of significant importance.

No adverse impacts on natural, scenic, historic and cultural resources are anticipated. All required environmental permitting and studies will be completed.

11. Whether the proposed Special Use Permit at the specified location will contribute to or promote the welfare or convenience of the public.

The proposed improvements to the 1965 facilities are necessary to maintain continued reliable electric service and to address the growing electric needs in Montgomery County.

Public services and facilities, including water/sewer, roads, schools, parks/recreation, and fire/rescue, will all benefit generally from the improved reliability of electric service to this area resulting from the proposed improvements.

12. The traffic expected to be generated by the proposed use, the adequacy of access roads and the vehicular and pedestrian circulation elements (on and off-site) of the proposed use, all in relation to the public's interest in pedestrian and vehicular safety and efficient traffic movement.

No additional traffic, excluding the temporary construction traffic, will be generated from the operation of the proposed improvements.



- 13. Whether, in the case of existing structures proposed to be converted to uses requiring a Special Use Permit, the structures meet all code requirements of Montgomery County.**

No existing structures will be converted to uses requiring a Special Use Permit. The proposed structures will meet all code requirements of Montgomery County.

- 14. Whether the proposed Special Use Permit will be served adequately by essential public facilities and services.**

Not applicable.

- 15. The effect of the proposed Special Use Permit on groundwater supply.**

The proposed project is not expected to affect the groundwater supply.

- 16. The effect of the proposed Special Use Permit on the structural capacity of the soils.**

Geotechnical studies and analysis will be completed before construction.

- 17. Whether the proposed use will facilitate orderly and safe road development and transportation.**

Not applicable.

- 18. The effect of the proposed Special Use Permit on environmentally sensitive land or natural features, wildlife habitat and vegetation, water quality and air quality.**

No adverse impacts on natural, scenic, historic and cultural resources or on water or air quality are anticipated. All required environmental permitting and studies will be completed.

- 19. Whether the proposed Special Use Permit use will provide desirable employment and enlarge the tax base by encouraging economic development activities consistent with the Comprehensive Plan.**



The proposed improvements to the 1965 facilities are necessary to maintain continued reliable electric service and to address the growing electric needs in Montgomery County. The general public, industry and business will benefit generally from the improved reliability of electric service to this area resulting from the proposed improvements.

20. Whether the proposed Special Use Permit considers the needs of agriculture, industry, and businesses in future growth.

See response to No. 19 above.

21. The effect of the proposed Special Use Permit use in enhancing affordable shelter opportunities for residents of the County.

See response to No. 19 above.

22. The location, character, and size of any outdoor storage.

No outdoor storage areas, excluding temporary construction storage areas, are required.

23. The proposed use of open space.

The improvements are at an existing substation and will not affect any proposed or existing open space use.

24. The location of any major floodplain and steep slopes.

The site does not include any floodplains or steep slopes.

25. The location and use of any existing non-conforming uses and structures.

Not applicable.

26. The location and type of any fuel and fuel storage.



Not applicable.

27. The location and use of any anticipated accessory uses and structures.

Not applicable.

28. The area of each use; if appropriate.

Not applicable.

29. The proposed days/hours of operation.

The substation operates continuously.

30. The location and screening of parking and loading spaces and/or areas.

Not applicable.

31. The location and nature of any proposed security features and provisions.

Not applicable.

32. The number of employees.

Not applicable.

33. The location of any existing and/or proposed adequate on and off-site infrastructure.

Not applicable.

34. Any anticipated odors, which may be generated by the uses on site.

No odors are anticipated with the operation of the substation. Temporary construction noise, dust or odors are possible.

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35. Whether the proposed Special Use Permit uses have sufficient measures to mitigate the impact of construction traffic on existing neighborhoods and school areas.

Construction traffic will be minimized to the extent practical.



PETER J. RECUPERO
INSTR #2014005818
TM #29-10 4

RODNEY K. SHAVER
& BETH L. SHAVER
INSTR #2007010015
TM #29-10 5

PRIVATE 50' WIDE ACCESS EASEMENT
(PLAT RECORDED IN P.B.12 PG.59)

APPALACHIAN POWER COMPANY
D.B. 257 PG. 420
TM #29-A6

C.L. DRAUGHN, DITCHING CONTRACTOR, INC
D.B.509 PG.327
TM #29-A11 & 12

STR. 42-107

PROPOSED
60' TALL H-FRAME
STRUCTURE

PROPOSED
100' TALL
MONOPOLE
STRUCTURE

PROPOSED
BUSWORK &
BREAKERS

PROPOSED
60' TALL H-FRAME
STRUCTURE

PROPOSED
CENTERLINE
RELOCATION

KATHERINE M. HANBURY REVOCABLE TRUST
INSTR #2008007825
TM #29-7 10

EXISTING TRANSMISSION LINE

PROPOSED CENTERLINE

EXISTING EDGE OF ROW

EXISTING CENTERLINE - GLEN LYN-HANCOCK 138KV LINE

STR. 42-108

APPROX. 35'
SETBACK

EXISTING EDGE OF ROW

WILLIAM M. FLINCHUM &
CAROLYN R. FLINCHUM
D.B.495 PG.435
TM #29-10 8

EXISTING TRANSMISSION LINE

PROPOSED
50-FOOT YARD
EXPANSION

PROPOSED
CONTROL
HOUSE

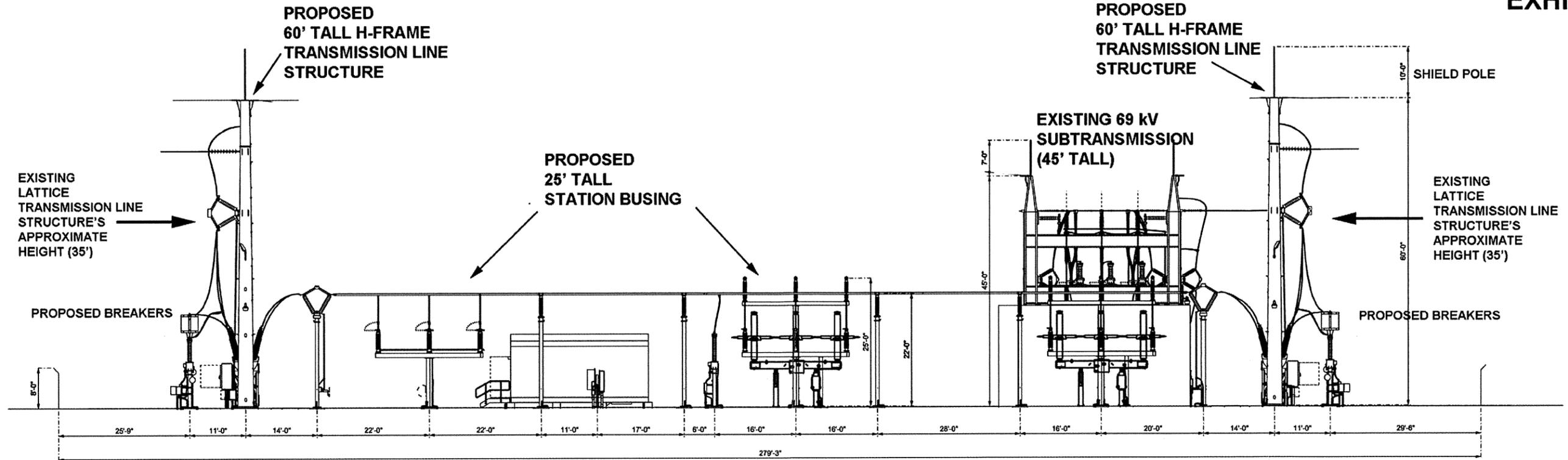
C.L. DRAUGHN, DITCHING CONTRACTOR, INC
D.B.509 PG.327
TM #29-A11 & 12

Appalachian Power Company's
proposed North Blacksburg Substation Improvements
(Parcel ID No. 032009; Tax Map ID No. 029-A 6)

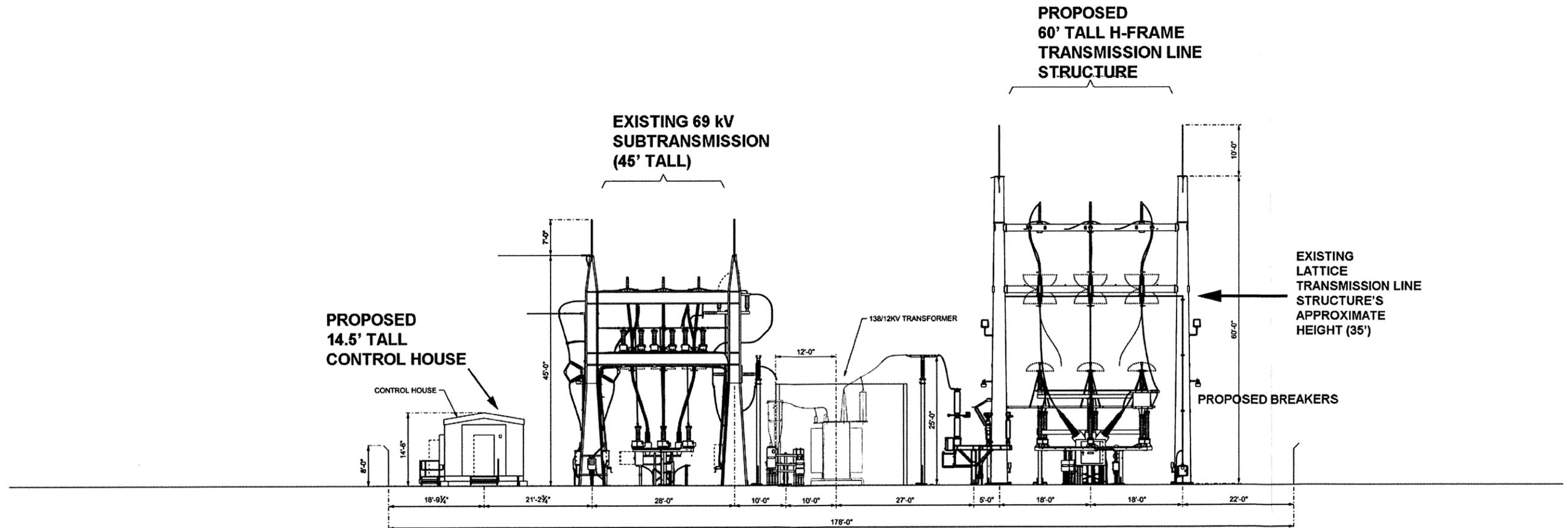
ADDRESS:
1214 Panorama Drive
Blacksburg, VA, 24060



NOTE: ACCESS ROADS TO PROPOSED AND EXISTING
TRANSMISSION LINE STRUCTURES ARE REQUIRED,
BUT NOT INCLUDED ON THIS MAP.



ELEVATION
LOOKING SOUTH



ELEVATION
LOOKING WEST

